Amendments to Claims

Claims 1-3 (Cancelled)

Claim 4 (Currently Amended) A substantially pure RDE 1 polypeptide encoded by the isolated a nucleic acid of claim 1 molecule which hybridizes under high stringency conditions to a complement of the nucleic acid molecule set forth as SEQ ID NO:2.

Filing Date: June 27, 2003

Claim 5-12 (Cancelled)

Claim 13 (**Currently Amended**) A method of preparing an RNAi agent, the method comprising incubating a dsRNA in the presence of an RDE-1. protein and an RDE-4 protein.

Claim 14-16 (Cancelled)

Claim 17 (New) The polypeptide of claim 4, which hybridizes under conditions of hybridization at 68°C in 5x SSC/5x Denhardt solution/1.0% SDS, followed by washing in 0.2x SSC/0.1% SDS at room temperature.

Claim 18 (New) A substantially pure polypeptide encoded by a nucleic acid molecule having at least 80% sequence identity with the nucleic acid molecule set forth as SEQ ID NO:2.

Claim 19 (**New**) The polypeptide of claim 18, which is encoded by a nucleic acid molecule having at least 95% identity with the nucleic acid molecule set forth as SEQ ID NO:2.

Claim 20 (New) The polypeptide of claim 18, which is encoded by a nucleic acid molecule having at least 98% identity with the nucleic acid molecule set forth as SEQ ID NO:2.

Claim 21 (New) A substantially pure polypeptide fragment comprising at least 30 contiguous amino acids of SEQ ID NO:3

Claim 22 (New) A fragment of claim 21, where in said fragment comprises amino acids 203 to 1021 of SEQ ID NO:3

Claim 23 (New) A substantially pure protein encoded by the nucleic acid molecule set forth as SEQ ID NO:2.

Claim 24 (New) A substantially pure protein comprising the amino acid sequence of SEQ ID NO:3.

Claim 25 (New) A substantially pure RDE-1 polypeptide encoded by a nucleic acid molecule which can complement a RDE-1 mutation.

Claim 26 (New) A fusion protein comprising a fragment of the polypeptide of any one of the preceding claims and a heterologous polypeptide.

Claim 27 (New) The fusion protein of claim 26, wherein the heterologous polypeptide is selected from the group consisting of an immunoglobulin Fc (IgFc) polypeptide, a lacZ polypeptide, a glutathione S-transferase (GST) polypeptide, a six histidine tag polypeptide and a signal sequence polypeptide.